



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/763,582	02/22/2001	Eiji Okamoto	9319S-000178	9306

7590 09/10/2003

Harness Dickey & Pierce
PQ Box 828
Bllomfield Hills, MI 48303

EXAMINER

QI, ZHI QIANG

ART UNIT PAPER NUMBER

2871

DATE MAILED: 09/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/763,582

Applicant(s)

OKAMOTO ET AL.

Examiner

Mike Qi

Art Unit

2871

H

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 February 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-23 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-15, drawn to a structure of a substrate for a liquid crystal device, classified in class 349, subclass 158.
 - II. Claims 16-23, drawn to a method for fabricating a liquid crystal device and a method for fabricating a substrate for a liquid crystal device, classified in class 349, subclass 187.
2. Inventions II and I are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the product can be made by another and materially different process. For example, the product can be made by a process wherein the step covering a portion of the liquid crystal layer side surface by a mask that does not need to be employed.
3. If Applicant elected Group I above, this application would contain claims directed to the following patentably distinct species of the claimed invention:
 - 1) a) the predetermined mark is an alignment mark [claim 3];
b) the predetermined mark is a process control mark [claim 4].

2) a) the maximum height R_y is set at 0.2 to 3 μm , the arithmetic mean roughness R_a is set at 0.02 to 0.3 μm , the ten-point average roughness R_z is set at 0.1 to 2.5 μm , and the mean wavelength S_m is set at 4 to 60 μm [claim 8];

b) the maximum height R_y is set at 1.5 to 2.0 μm , the arithmetic mean roughness R_a is set at 0.15 to 0.3 μm , the ten-point average roughness R_z is set at 1.3 to 1.8 μm , and the mean wavelength S_m is set at 15 to 25 μm [claim 9];

c) the maximum height R_y is set at 0.7 to 1.2 μm , the arithmetic mean roughness R_a is set at 0.1 to 0.2 μm , the ten-point average roughness R_z is set at 0.5 to 1.0 μm , and the mean wavelength S_m is set at 35 to 50 μm [claim 10];

d) the maximum height R_y is set at 0.6 to 1.2 μm , the arithmetic mean roughness R_a is set at 0.05 to 0.15 μm , the ten-point average roughness R_z is set at 0.5 to 1.0 μm , and the mean wavelength S_m is set at 15 to 25 μm [claim 11];

e) the maximum height R_y is set at 0.4 to 1.0 μm , the arithmetic mean roughness R_a is set at 0.04 to 0.10 μm , the ten-point average roughness R_z is set at 0.3 to 0.8 μm , and the mean wavelength S_m is set at 8 to 15 μm [claim 12];

f) the maximum height R_y is set at 0.8 to 1.5 μm , the arithmetic mean roughness R_a is set at 0.05 to 0.15 μm , the ten-point average roughness R_z is set at 0.7 to 103 μm , and the mean wavelength S_m is set at 8 to 15 μm [claim 13].

Applicant is required under 35 U.S.C. 121 to elect a single "a" or "b" from element 1) and a single one of the "a" to "f" from element 2) disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claims 1-2 and 5-7 appear to be generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

4. Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.


Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Art Unit: 2871

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mike Qi whose telephone number is (703) 308-6213.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Mike Qi
August 27, 2003


ROBERT H. KIM
SUPERVISOR / EXAMINER
TECHNOLOGY GROUP 100